

THE AMENDMENTS

In The Claims

1. (Currently Amended) A process for preparing Y-branched carbon nanotubes comprising the steps of:

- (a) loading a catalyst on a carbon nanotube carrier;
- (b) pre-treating the catalyst-loaded carbon nanotubes prepared from step (a) to have the catalyst bonded ~~tightly~~ to the surface of the carbon nanotubes; and
- (c) performing a synthetic reaction of new carbon nanotubes using the ~~obtained catalyst-loaded pretreated~~ carbon nanotubes of step (b).

2. (Original) The process according to claim 1, wherein the carbon nanotube carrier is single-wall or multi-wall carbon nanotubes, or carbon nanofibers with or without Y-branched structure.

3. (Cancelled)

4. (Currently amended) The process according to claim 1, wherein the catalyst is ~~used as a form selected from the group consisting of~~ metal ~~per-se~~, metal oxide, metal nitride, metal boride, metal fluoride, metal bromide, metal sulfide ~~or the~~ and a mixture thereof.

5. (Currently amended) The process according to claim 1, wherein the catalyst is a metal complex or a metal alloy comprising at least one ~~or more metals~~ metal.

6. (Currently amended) The process according to claim 1, wherein the step of loading a catalyst is carried out by impregnation, ~~or~~ precipitation, sol-gel method, chemical vapor deposition, sputtering, evaporation, dispersing method or spraying method.

7. (Currently Amended) The process according to claim 1, wherein the ~~tight~~ bonding between the catalyst and the surface of the carbon nanotubes is accomplished by a chemical pre-

treatment selected from the group consisting of oxidation, reduction, hydrogenation, sulfidization and acid treatment, or a physical pre-treatment selected from the group consisting of compression, drying, absorption and high temperature treatment.

8. (Currently Amended) The process according to claim 1, wherein the ~~tight~~ bonding between the catalyst and the surface of the carbon nanotubes is caused by decomposition, damage or destruction of the surface of the carbon nanotubes.

9. (Currently Amended) The process according to claim 1, wherein the synthetic reaction is performed by using a suspension in which the catalyst-loaded carbon nanotubes are dispersed in a solvent.

10. (Currently Amended) ~~The process according to claim 1;~~ The process according to claim 9, wherein the suspension ~~additionally comprised~~ comprises a surfactant.

11. (Currently Amended) The process according to claim 10, wherein the surfactant is selected from the group consisting of non-ionic surfactants, anionic surfactants, cationic surfactants, binary ionic surfactants, ~~and~~ carbohydrates, silicones and fluorocarbons.

12. (Previously Presented) The process according to claim 1, wherein the synthetic reaction is performed by a method selected from the group consisting of thermal heating, chemical vapor deposition, plasma method, laser ablation, and radio frequency heating.

13-16. (Cancelled)

17. (Currently Amended) The process according to claim 2, wherein the ~~tight~~ bonding between the catalyst and the surface of the carbon nanotubes is accomplished by a chemical pre-treatment selected from the group consisting of oxidation, reduction, hydrogenation, sulfidization and acid treatment, or a physical pre-treatment selected from the group consisting of compression, drying, absorption and high temperature treatment.

18. (Currently Amended) The process according to claim 2, wherein the ~~tight~~ bonding between the catalyst and the surface of the carbon nanotubes is caused by decomposition, damage or destruction of the surface of the carbon nanotubes.

19. (Currently Amended) The process according to claim 2, wherein the synthetic reaction is performed by using a suspension in which the catalyst-loaded carbon nanotubes are dispersed in a solvent.

20. (Cancelled)

21. (New) The process according to Claim 1, wherein the Y-branched carbon nanotubes prepared has at least one Y-junctions.

22. (New) The process according to claim 1, further comprises a step (d) which uses the carbon nanotubes obtained from step (c) as a carrier and repeats step (a), (b), (c) at least twice, whereby the obtained Y-branched carbon nanotubes are tree-shaped multiple Y-branched carbon nanotubes.

23. (New) The process according to claim 1, wherein the synthetic reaction is performed to grow branches of the new carbon nanotubes at the position where the catalyst is bonded.